
Expect *the Best* for Your Child



How to use the *new learning standards* in reading/English language arts, mathematics, science, and social studies to help your child do well in *grades 9 through 12*.

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New Standards = Better Goals for Learning

DC Public Schools has adopted new learning standards for core subjects, including reading/English language arts, mathematics, science, and social studies. The new standards show what students should know and be able to do:

- in each subject,
- at each grade level, and
- in every school.

Standards tell **all** students that we expect them to succeed in school. This is a powerful message: When children know we expect them to do well, they will believe in themselves more and work harder.



Our new learning standards are among the best in the nation. They are the first step toward creating a world-class school system in the District of Columbia.

Standards in the Classroom

Lessons and activities should reflect the standards for that grade. Textbooks and year-end tests also should match the standards. Parent-teacher conferences should focus on how well your child is meeting the standards.

If your child is having trouble meeting the standards, frequent informal tests will help teachers and you find out early so your child can get extra help.

Talk to Your Child's Teacher

Talk to your child's teacher about the standards and how your child is doing in school. Here are some questions you may want to ask.

To learn more about a standard:

- What does this standard mean? Can you show me examples of work that meet this standard?
- When will my child work on this during the school year?
- What activities, materials, and lessons are you using in school to help my child meet the standard? What are the class work and homework for this standard?
- How is my child tested on this standard? How do you know if my child has mastered it?
- May I look at some of my child's work on this standard?

To learn how your child is doing in school:

- Is my child reading at grade level? Can you show me some books that my child can read?
- How did you decide the grades on my child's report card?
- How much time each day does my child spend reading in class? Writing? Doing mathematics?
- In what subjects is my child ahead or behind?
- What do the end-of-year tests tell about how my child is doing?

If your child is behind:

- How are you helping him/her catch up?
- What extra help do you suggest for my child?
- What can I do at home to help my child do better in school?

Reading/English Language Arts in *Grade 9*

In grade 9, students explore many ways that words can express thoughts. They find the authors' main ideas in text and learn how writers support their ideas through word choice, sentence and paragraph structure, and other methods.

Grade 9 students learn that different cultures had their own styles of poetry, drama, and other works of art. Students also consider how different kinds of works, such as poetry and film, deal with the same subjects. They investigate how form supports and enhances content, and they create written text and oral presentations that effectively use grammar and pronunciation to express their ideas. Students prepare to do successful independent research.

TOPICS COVERED

Reading/English language arts standards cover the following seven topics or strands. Expectations for what a child should be able to do increase from one grade to the next.

- Using and understanding spoken words (*Language Development*)
- Using text to persuade through arguments supported by evidence, to give directions, and to convey facts and ideas in other ways (*Informational Text*)
- Learning from and enjoying stories, poems, and plays (*Literary Text*)
- Using materials to find out information (*Research*)
- Using written words to share information, ideas, and feelings (*Writing*)
- Getting information from television, film, Internet, or videos (*Media*)
- Knowing how to spell and use grammar correctly (*English Language Conventions*)

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF GRADE 9, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Deliver focused oral presentations that use details, examples, or anecdotes to express information or a point of view. Use proper eye contact, pace, and volume; pronounce words correctly and clearly; and use gestures to express ideas effectively.

Explain how one section of a story or article fits in with the complete work.

Show how a speech uses emotion, images, examples, and other methods to connect with the audience.

Analyze the characters, structure, and themes of classical Greek drama and epic poetry. For example, explain how conflict between Creon and Antigone in Sophocles' tragedy *Antigone* represents the timeless conflict between human law and divine law.

Describe the different functions of a playwright, director, technical designer, and actor.

Discuss the strengths and weaknesses of different information resources, including the Internet.

Write well-organized stories that have a clear theme, sensory details, and specific language.

Explain the techniques used in a radio or television message to reach a specific audience.

RESOURCES

Merriam-Webster Online

www.m-w.com

Look up a word in the online dictionary and hear it pronounced; find a synonym in the online thesaurus; do crossword puzzles; play word games; find a word of the day for English language learners; and more. Free and premium content.

District of Columbia Public Library Booklists

www.dclibrary.org/teens/teen-book-lists.html

Recommended reading, including the DCPL Booklists for Teens; Young, Black & Gifted; and lists from the American Librarian Association.

Teen Poetry Wiki on Teenspace, the Internet Public Library for Teens

www.ipl.org/div/teenpoet

Teen poets can be creative on their personal pages or comment on the work of others.

Arena Stage Company's Southwest Drama Project

www.arenastage.org/education

Visit the Web site to find out more about the Southwest Drama Project, the theater's student outreach programs to its Southwest Washington, DC (1101 Sixth St., SW), neighborhood, the student playwrights' project, arts enrichment projects, and more.

Reading/English Language Arts in *Grade 10*

In grade 10, students see how authors use style, structure, and other elements to connect with their audience and how they make writing more powerful by using words with connotations (associations with other events or ideas) and other devices. Students present information in logical ways and support statements with facts.

Students think deeply about the structure, function, and effect of text along with its content. They connect works from different eras to important ideas of their times, and find primary resources, such as diaries or newspapers, from the same time period. They see how literature from earlier eras can influence works that are produced today. Students also complete an independent research project.

TOPICS COVERED

Reading/English language arts standards cover the following seven topics or strands. Expectations for what a child should be able to do increase from one grade to the next.

- Using and understanding spoken words (*Language Development*)
- Using text to persuade through arguments supported by evidence, to give directions, and to convey facts and ideas in other ways (*Informational Text*)
- Learning from and enjoying stories, poems, and plays (*Literary Text*)
- Using materials to find out information (*Research*)
- Using written words to share information, ideas, and feelings (*Writing*)
- Getting information from television, film, Internet, or videos (*Media*)
- Knowing how to spell and use grammar correctly (*English Language Conventions*)

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF GRADE 10, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Recognize how a speaker's accent or diction can make a speech more or less effective.

Analyze effective speeches such as Martin Luther King's "I Have a Dream" address. Deliver a speech with some of the same features.

Distinguish between the denotation (expressing the word's definition only) and connotation (expressing associated ideas and feelings in addition to the definition).

Analyze an instruction manual, guidebook, or article to see how well it fulfills its purpose. For example, try to follow directions for using a new program on the computer. Were the directions clear and accurate?

Write poems using a range of poetic techniques, forms (sonnet, ballad), and figurative language.

Describe how an author's choice of words helps achieve the purpose of the work. For example, words that are short and direct make a message sound more urgent, so they often are used in ads.

Show how the characters, structure, and themes of classical myths, drama, and epic poetry relate to today's stories and books. For example, what current films tell stories of a hero's journey?

Edit a piece of writing to make it more effective. For example, improve the logic, support statements with facts, and use words that will be more meaningful to the audience.

RESOURCES

The American Presidency Project

www.presidency.ucsb.edu/ws/

An easily searchable archive of speeches and other public papers of American presidents, from Herbert Hoover to George W. Bush.

U.S. National Archives

www.archives.gov/exhibits/featured_documents

View or download images of the original text, transcripts, and other resources for historic documents, including the Emancipation Proclamation, the District of Columbia Emancipation Act, the Magna Carta, and a letter from Jackie Robinson.

Fire Escape

www.mitaliperkins.com

A Web site from the popular author of teen books, where teen immigrants practice the craft of writing and share their experiences as newcomers to America.

Poetry 180

www.loc.gov/poetry/180

From the Library of Congress, a poem a day for American high school students, plus a guide to reading a poem out loud, and links to the Library's Poetry and Literature Center.

Reading/English Language Arts in *Grade 11*

In grade 11, students are exposed to the various periods of American literature and the ideas that shaped the writing of those times. They use examples from American literature to improve their writing styles.

Grade 11 students work with different viewpoints and make their points in different ways — for example by using brief stories to illustrate arguments and by using logic to support them. They use varied sentence structures and focus on small details. They see that authors write works that combine multiple themes, and they learn how two authors can use different kinds of work (such as a speech and a novel) or different writing styles to make similar points.

TOPICS COVERED

Reading/English language arts standards cover the following seven topics or strands. Expectations for what a child should be able to do increase from one grade to the next.

- Using and understanding spoken words (*Language Development*)
- Using text to persuade through arguments supported by evidence, to give directions, and to convey facts and ideas in other ways (*Informational Text*)
- Learning from and enjoying stories, poems, and plays (*Literary Text*)
- Using materials to find out information (*Research*)
- Using written words to share information, ideas, and feelings (*Writing*)
- Getting information from television, film, Internet, or videos (*Media*)
- Knowing how to spell and use grammar correctly (*English Language Conventions*)

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF GRADE 11, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Distinguish among different kinds of evidence used to support conclusions — for example between logical evidence (derived from orderly argument), empirical evidence (drawn from observation or experience), and anecdotal evidence (based on nonscientific reports or stories).

Analyze U.S. documents for their historical and literary significance (for example, the Declaration of Independence, Abraham Lincoln’s “Gettysburg Address” and Martin Luther King’s “Letter from Birmingham Jail”).

Evaluate a speech for clarity, quality, effectiveness, and overall coherence. Consider the speaker’s key points, arguments, evidence, organization of ideas, delivery, diction, and syntax (sentence construction).

Locate and interpret small or subtle details in an article or speech. Identify which ideas or arguments each detail supports.

Describe how using a variety of sentence structures (for example, simple, compound, and complex sentences) makes an essay more effective.

Analyze the techniques used in media messages for a particular audience, and evaluate their effectiveness. For example, listen to a recording of Orson Welles Mercury Theatre Company’s radio broadcast of *War of the Worlds* and decide what made the audience react to it so strongly.

Identify multiple themes in a literary work, such as in Twain’s *The Adventures of Huckleberry Finn* or Steinbeck’s *The Grapes of Wrath*.

RESOURCES

The Pulitzer Prizes

www.pulitzer.org/Archive/archive.html

Texts of winning journalism (1995–2006) plus lists of winners in other categories and information about the awards.

The Studio Theatre

www.studiotheatre.org/support/programs.php

Live productions of contemporary American plays, offering Pay-What-You-Can and discount performances. Click on the link for information on outreach programs to the company’s Logan Circle community (1501 14th St., NW).

The Poetry Foundation

www.poetryfoundation.org

News and features about poems and poets, Poem of the Day, text and audio poetry, book reviews and selections from Poetry Magazine, and a searchable database of thousands of poems.

District of Columbia Public Library, Black Renaissance in Washington, DC, Project

www.dclibrary.org/blkren

Visit the Black Studies Division of the Martin Luther King library (901 G St., NW) or branches to explore a collection of literature and history of this important era. The Web site has authors’ biographies and background about the collection.

Reading/English Language Arts in *Grade 12*

In grade 12, students create and support effective arguments and recognize logical fallacies, such as *ad hominem* attacks (attacking the person instead of the idea). They see how different authors use evidence, assumptions, beliefs, and other factors to reach their conclusions.

Grade 12 students study literature of other countries to build writing skills and enrich their knowledge of subjects such as history and social studies. They learn that authors have different points of view, and they identify and interpret points of view in literature. They use many structures, forms, and conventions to create works of nonfiction as well as original short stories, poetry, and plays.

TOPICS COVERED

Reading/English language arts standards cover the following seven topics or strands. Expectations for what a child should be able to do increase from one grade to the next.

- Using and understanding spoken words (*Language Development*)
- Using text to persuade through arguments supported by evidence, to give directions, and to convey facts and ideas in other ways (*Informational Text*)
- Learning from and enjoying stories, poems, and plays (*Literary Text*)
- Using materials to find out information (*Research*)
- Using written words to share information, ideas, and feelings (*Writing*)
- Getting information from television, film, Internet, or videos (*Media*)
- Knowing how to spell and use grammar correctly (*English Language Conventions*)

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF GRADE 12, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Develop and deliver sound, rational arguments that are well supported with evidence that fits the audience and situation where the speech is given. Speak clearly and correctly and use appropriate organization, gestures, tone, and vocabulary.

Revise a written work to improve style, word choice, sentence variety, and subtlety of meaning. Does the work fit its audience? Does the kind of work fit its purpose?

Evaluate the logic within procedural text such as instruction manuals, product support materials, and contracts.

Evaluate the effectiveness of the logic and use of evidence in an author's argument.

Connect an author's choice of words and imagery to the theme, tone, or mood of a literary work. Support the analysis with evidence from the text.

Explain how different authors use irony, tone, mood, style, and sounds of words to serve specific purposes in literary works.

Analyze the influence of classical Greek drama on modern plays.

Relate literary works and their authors to the political events and seminal ideas of their times. For example, explain how the novel *Les Misérables* by Victor Hugo expressed the themes of the French Revolution.

RESOURCES

The Shakespeare Theatre Company

www.shakespearetheatre.org, click on "Education"

Education, acting, and employment opportunities at the theater's Education Studios at 516 8th St., SE. The Web site also has summaries, directors' notes, and other background on current and past productions.

Folger Shakespeare Library

www.folger.edu

Free exhibitions of original editions of Shakespeare's plays and other theater history in the library's Great Hall (201 East Capitol St., SE). The Web site has information on current productions in a replica of Shakespeare's Old Globe Theatre, as well as programs for students and families.

Academy of American Poets

www.poets.org

Click on "On Writing" on the top menu for articles on the basics of writing, the craft of poetry, the writing life, and more.

National Museum of Women in the Arts

www.nmwa.org/library

Offers readings by authors, family festivals, and role-model workshops to bring teens together with women who have been successful authors and artists (1250 New York Ave., NW).

Algebra I in *High School*

In Algebra I, students reason symbolically, learning that letters such as x and y stand for numbers. They solve equations, using the relationships of known values and numbers to figure the unknown values. They also express values as points on a graph, showing the relationship of the different parts of an equation.

Algebra I students use algebra to calculate ratios, proportions, rates, and percentages. They apply their skills to solve many kinds of practical problems — for example, figuring how many dollars a 15 percent interest rate will add to a credit card bill each month, or how many dollars a 20 percent discount will save.

TOPICS COVERED

Standards for grades 9 through 12 are organized by discipline: Algebra I, Geometry, Algebra II, Probability and Statistics, and Precalculus. Each discipline is taught as a separate course.

To allow schools and teachers flexibility, these courses do not have to be taught in a specific order or in a specific year. For example, although students typically take Algebra I in grade 9, some students take this course in grade 8, and other students might take it in later years.

Algebra I students explore these topics:

- Number sense and operations indicators;
- Patterns, relations, and algebra indicators; and
- Data analysis, statistics, and probability indicators.

Many of the concepts studied in Algebra I will be familiar from mathematics in the elementary grades, where students used elements of algebraic thinking, such as equations, to construct and solve problems.

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF THE ALGEBRA I COURSE, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Find linear equations that represent lines that are either perpendicular or parallel to a given point — for example, by using the point-slope formula. (A linear equation is an algebraic equation of the form $y = ax + b$, with constants a and b . The graph of this kind of equation is a straight line.)

Calculate and apply ratios, proportions, rates, and percentages to solve a range of everyday problems. Example: If your current pay is \$770 per week, what is your new pay if you receive a 4 percent raise?

Estimate the results of problems involving real numbers — such as estimating the approximate values of square roots. For example, students know that the square root of 3 is approximately 1.7 and the square root of 16 is 4, so they can estimate that the square root of 48 is approximately 6.8 (1.7×4).

Explain the relationship between different ways to represent a line. Find the slope of a line from its graph or from a linear equation that represents the line — for example, for the equation $3x + 4y = 12$.

Use an equation to describe a line using a geometric description of the line. For example, show what kind of line has a slope equal to zero. Explain what it means if a line has a positive slope.

Solve everyday problems that can be modeled using systems of linear equations or inequalities. Find the solution using algebra and graphs. For example: Mary drove to work on Monday at 40 mph and arrived 5 minutes late. She left at the same time on Friday, drove at 45 mph and arrived 3 minutes early. How far does Mary drive to work?

RESOURCES

Numb3rs Math Education Program

www.cbs.com/primetime/numb3rs/ti/index.shtml

Activities and projects based on the math in the popular television show.

DC ACTS

carnegieinstitution.org/first_light_case/horn/careers/careersindex.html

We are Scientists/Mathematicians/
Engineers/Physicians

Profiles of African American leaders in mathematics and science.

algebra.help

www.algebrahelp.com

A sponsored site that offers lessons, step-by-step calculators, sample problems, resources, and interactive worksheets for students on algebra concepts.

Getsmarter.org

www.getsmarter.org

An online math and science challenge, plus quizzes, resources, and links. Sponsored by the National Association of Manufacturers and the U.S. Department of Commerce.

Geometry in *High School*

In Geometry, students focus on figures, measurement, proof, and coordinate geometry (making a connection to basic algebra). They explore the study of points, lines, and planes. They study the properties of various figures, understand their spatial relationships, and solve problems using those relationships. In particular, students focus on right triangles, including the Pythagorean theorem, special triangle relationships, and trigonometry. Students explore volume, surface area, and lateral area.

Students also learn to think logically using inductive and deductive reasoning. They learn to make and test hypotheses, write step-by-step proofs, test the logic of their arguments, and apply what they learn about one set of relationships to those of a similar figure.

TOPICS COVERED

Standards for grades 9 through 12 are organized by discipline: Algebra I, Geometry, Algebra II, Probability and Statistics, and Precalculus. Each discipline is taught as a separate course.

To allow schools and teachers flexibility, these courses do not have to be taught in a specific order or in a specific year. For example, students might take Geometry in grade 9, 10, or 11 depending on the sequence of course offerings at each high school.

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF THE GEOMETRY COURSE, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Calculate perimeter, circumference, and area of geometric figures, such as circles, triangles, and trapezoids.

Use the properties of special triangles (for example, isosceles or equilateral triangles) to solve problems.

Write simple proofs of geometric theorems, including theorems about triangles, perpendicular lines, and parallel lines. (A theorem is a formula or a statement that can be proved — for example, the longest side of a triangle is opposite its greatest angle.)

Use a compass or straightedge to draw figures that are congruent (having the same shape and size) or similar (having the same shape but different sizes).

Solve simple triangle problems using the Pythagorean theorem — for example, in a right triangle, the square of the hypotenuse is equal to the sum of the other two sides: $a^2 + b^2 = c^2$.

Use the point-slope form of an equation to represent lines that are either perpendicular (at right angles) to a given line or that are parallel to the line and pass through a point.

Be able to visualize solid objects and recognize their projections, cross sections, and graph points in three dimensions.

Relate changes in measurements of one part of an object to changes in other parts — for example, explain how changing the height of a cylinder changes its surface area or volume.

RESOURCES

Eric Weisstein's World of Mathematics

mathworld.wolfram.com/topics/Algebra.html

Definitions, applications, history, and terminology on mathematics topics. The free site also offers an online MathWorld classroom, interactive entries, plus recreational mathematics and math humor.

Math in the Media

www.ams.org/mathmedia

A monthly online magazine with news, features, and book reviews about the world of mathematics and mathematicians.

National Building Museum

www.nbm.org

Solutions to practical problems in architecture and engineering in exhibits at the museum's downtown DC location (401 F St., NW) or online. The museum also offers family programs and educational resources.

S.O.S. Mathematics

www.sosmath.com

Sponsored site with lots of free resources and information on high school and college-level mathematics.

Algebra II in *High School*

In Algebra II, students focus on abstract thinking skills — extending specific examples to work with more advanced functions. They describe and work with many kinds of number patterns and relationships and understand the principles behind those relationships.

Algebra II students solve equations and inequalities using algebra, graphs, and numeric methods. Students learn and apply functions such as logarithms, exponents, and square roots to solve everyday problems, such as calculating compound interest. They investigate geometry concepts, such as sine, cosine, and tangents, and they relate geometric and algebraic representations of lines to simple curves. They communicate data in graphic as well as numerical form.

TOPICS COVERED

Standards for grades 9 through 12 are organized by discipline: Algebra I, Geometry, Algebra II, Probability and Statistics and Precalculus. Each discipline is taught as a separate course.

To allow schools and teachers flexibility, these courses do not have to be taught in a specific order or in a specific year. For example, students might take Algebra II as early as grade 9 if they took Algebra I in grade 8. Some students take Algebra II before Geometry and some students take the course after Geometry.

Algebra II students explore these topics:

- Number sense and operations indicators;
- Patterns, relations, and algebra indicators;
- Geometry indicators; and
- Data analysis, statistics, and probability indicators.

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF THE ALGEBRA II COURSE, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Be able to represent complex numbers (for example, $a + bi$, where a and b are real numbers). Know how to add, multiply and invert complex numbers.

Identify arithmetic and geometric sequences and series. Use their properties to solve problems. For example, be able to find the sum of all the terms in a finite series — a series that has a limited number of terms.

Understand functional notation, evaluate a function at a specified point in its domain, and perform operations on functions with an emphasis on domain and range. For example, if $f(x) = 7x + 2$, find the value of $f(3)$.

Simplify rational expressions. Solve rational equations and inequalities.

Define the sine, cosine, and tangent of an acute angle. Use these to solve problems.

Relate geometric and algebraic representations of lines and simple curves.

Represent a set of data graphically — choosing the chart or graph that will tell the story most clearly. Use appropriate statistics (such as how the data points are distributed among quartiles) to communicate information about the data.

RESOURCES

Eric Weisstein's World of Mathematics

mathworld.wolfram.com/topics/Algebra.html

Definitions, applications, history, and terminology on mathematics topics. The free site also offers an online MathWorld classroom, interactive entries, plus recreational mathematics and math humor.

The Math Forum

mathforum.org/library/drmath/drmath.high.html

A rich online resource featuring “Ask Dr. Math” for personalized responses, plus a searchable database of answers to common questions.

National Academy of Sciences

www.koshland-science-museum.org

Students can visit changing exhibits at the museum at 6th and E streets, NW, (\$3 admission with student ID) or tour the interactive Web site. NAS offers free concerts and exhibits of art and photography related to chemistry and other sciences at 2101 Constitution Ave., NW.

algebra.help

www.algebrahelp.com

A sponsored site that offers lessons, step-by-step calculators, sample problems, resources, and interactive worksheets for students on algebra concepts.

Probability & Statistics in *High School*

Students learn to make predictions and to develop and evaluate data. They use concepts such as independent events and random variables to determine the probability of outcomes — for example, how many times a coin will land on heads in a certain number of tosses. Students also learn to represent data visually to express ideas.

Precalculus in *High School*

Students explore principles that underlie the mathematics of change and motion. They use number patterns and relationships to solve equations and apply solutions to everyday problems. Students also learn principles of trigonometry, the mathematics of arcs and angles.

TOPICS COVERED

Standards for grades 9 through 12 are organized by discipline: Algebra I, Geometry, Algebra II, Probability and Statistics, and Precalculus. Each discipline is taught as a separate course.

To allow schools and teachers flexibility, these courses do not have to be taught in a specific order or in a specific year.

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF THE PROBABILITY AND STATISTICS COURSE, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Know the definition of conditional probability and use it to solve for probabilities. For example, if you roll two dice, what is the probability you will roll a pair if the sum of the faces is even?

Use uniform, normal, and binomial distributions to solve problems. For example, if you guess randomly on a test with four true-false questions, what is the probability that you will guess right on three of the four questions?

Know the definitions of mean, median, and mode in describing the distribution of data. Know how to compute each of these.

BY THE END OF THE PRECALCULUS COURSE, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Add, subtract, multiply, and divide complex numbers (numbers in the form $a + bi$, where a and b are real numbers and $i^2 = -1$.)

Explain trigonometric functions, including sine, cosine, and tangent. Show how the functions relate to their geometric definitions.

From their algebraic equations, graphs or numeric representations, recognize functions as polynomial, rational, logarithmic, or exponential.

Apply properties of angles, parallel lines, arcs, and other functions to solve problems.

RESOURCES

Eric Weisstein's World of Mathematics

mathworld.wolfram.com/topics/Algebra.html

Definitions, applications, history, and terminology on mathematics topics. The free site also offers an online MathWorld classroom, interactive entries, plus recreational mathematics and math humor.

STATS from George Mason University

www.stats.org/

A nonprofit resource that investigates the use and misuse of statistics and science in society and the media. Includes a guide to using statistics, plus links to government and other statistics.

National Aeronautics and Space Administration

www.nasa.gov/audience/forstudents/9-12/features/index.html

Trigonometry and other applied mathematics in action. NASA's site for students is a gold mine of features, learning opportunities, space images, and podcasts about current missions.

Fedstats

www.fedstats.gov

The gateway to statistics from more than 150 U.S. agencies, plus links to other statistical sites.

Earth Science in *High School*

In high school, students study the chemical and physical processes that formed Earth and continue to change our planet today. As they learn more about the Earth's mountains and rocks, oceans, weather, and other features, they can use this knowledge to test different theories of how the universe was formed, including the planets in our own solar system.

High school students also use advanced studies and measurements to learn more about the geological processes that shape our world, such as plate tectonics (movements of large pieces of the Earth's crust), how wind is created, and how water flows through watersheds from land to sea.

Environmental Science in *High School*

In Environmental Science, students explore the Earth's system of interdependent components and how these components are affected by natural processes and human activities. Students also investigate the ability of science and technology to meet local, national, and global challenges to the environment.

TOPICS COVERED

Science standards in high school build on ideas and topics covered in earlier grades.

Major topics covered by high school Earth Science include: Scientific Thinking and Inquiry, Universe, Solar System, Earth System, Hydrologic Cycle, Rock Cycle, and Plate Tectonics.

Major topics covered by high school Environmental Science include Scientific Thinking and Inquiry, Environmental Systems, Ecosystems, Populations, Natural Resources, Watersheds and Wetlands, Energy in the Earth System, and Environmental Quality.

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF THE EARTH SCIENCE COURSE, YOUR CHILD SHOULD KNOW THESE CONCEPTS AND BE ABLE TO PERFORM THESE SKILLS:

Explain that the universe contains many billions of galaxies. Each galaxy is made of billions of stars and form most of what we can see of the universe.

Construct a model and explain the relationships among planetary systems, stars, multiple-star systems, star clusters, galaxies, and galactic groups in the universe.

Use computer models to predict the effects of increasing greenhouse gases on the climate for the planet as a whole and for specific regions.

Understand how plate tectonics have altered the land, sea, and mountains on the Earth's surface. Analyze the evidence that supports the hypothesis of the movement of the plates.

Observe and explain how rivers and streams are dynamic systems that erode and transport sediment, change their course, and flood their banks in natural and recurring patterns.

BY THE END OF THE ENVIRONMENTAL SCIENCE COURSE, YOUR CHILD SHOULD KNOW THESE CONCEPTS AND BE ABLE TO PERFORM THESE SKILLS:

Explain how environmental change in one part of the world can impact seemingly distant places and systems.

Describe how resources, such as food supply, the availability of water, and shelter influence populations.

Describe the causes of — and the efforts to control — erosion in the Chesapeake Bay.

RESOURCES

Capital Region Earth Force

www.earthforce.org/section/offices/capitalregion/

Programs, activities, Web links, and other resources for starting projects. Students protect our local environment by checking air and water quality and other activities.

National Geographic Society

www.nationalgeographic.com

Students can download world music, find world maps, or even launch a virtual hurricane or earthquake on the interactive Web site. Free exhibits in Explorers' Hall (17th and M streets, NW) showcase our diverse world.

U.S. Geological Survey

www.usgs.gov

On the home page map, click on "DC" for real-time information on local water quality, DC facts, and links to local conservation projects, maps, and other tools.

National Oceanic and Atmospheric Administration

www.noaa.gov

This site features current weather watches, warnings, and maps; ocean and coastal updates; real-time images of Earth from space; and interactive learning activities.

Biology in *High School*

High school students explore cell processes, such as respiration (energy-producing oxidation) and photosynthesis (using sunlight, water, and carbon dioxide to produce oxygen and energy). Students learn that cells pass their traits to the next generations through DNA. They learn that changes in DNA result in new traits that make species more diverse and may help a species adapt to changes in its environment.

High school students explore why many different organisms exist on Earth, why different kinds of organisms have the same features, why organisms of related species share traits, and why some species become extinct. Students study how living things relate to each other and to their environments, and explore roles humans play in those interactions.

TOPICS COVERED

Science standards in high school build on ideas and topics introduced in earlier grades. Major topics covered by high school Biology standards include:

- *Chemistry of Living Things* — The study of atoms and molecules that make up living things and how these substances act together to support life.
- *Cell Biology* — The structures, functions, processes, and cycles of activities of cells.
- *Genetics* — The study of traits, such as hair or eye color, and variations and how these are passed from one generation to another.
- *Plant Biology (Botany)* — The structures, functions, processes, and life cycles of plants; the roles of plants in the ecosystem.
- *Biological Evolution* — How living things develop from earlier forms of life; how new and different organisms develop as a result of changes in genetic material.
- *The Mammalian Body* — The study of warm-blooded vertebrate animals that can make milk to feed their young — for example, dogs, lions, and humans.
- *Ecosystems* — How living things depend on each other and the environment that they inhabit; the changing relationships among living things, their habitats, and their resources.

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF THIS HIGH SCHOOL BIOLOGY COURSE, YOUR CHILD SHOULD KNOW THESE CONCEPTS AND BE ABLE TO PERFORM THESE SKILLS:

In an investigation, identify results that do not fit with the others. Find possible sources of error, including conditions that may allow unwanted factors to affect the results — for example, conducting an investigation in a natural setting, such as a garden, instead of in a laboratory.

Recognize that living things are made of atoms that are bonded together to form molecules. Organic molecules, which contain carbon, are some of the largest and most important molecules in living things.

Describe the structure of the water molecule. Explain how water is different from other substances and why it is important to living things.

Know that genes are a set of instructions in the DNA of a living thing. The genes specify how amino acids should be arranged in the protein of an organism to give the next generation the same traits as the parent.

Know that every species has its own characteristic DNA sequence.

Explain how plants are essential to animal life on Earth.

Explain how body systems, such as the digestive, respiratory, reproductive, or circulatory systems, interact with each other.

Explain how an ecosystem is reasonably stable when competing parts (such as the numbers of predators and prey) are in balance.

RESOURCES

U.S. Botanic Garden

www.usbg.gov

The U.S. Botanic Garden has free exhibits of local and exotic plants, as well as family programs in the Conservatory on the National Mall at First Street, NW. On the Web site, a School Garden Wizard helps students plan and grow their own garden.

Smithsonian National Zoological Park

nationalzoo.si.edu

Teens can volunteer during the summer and take part in learning activities year round. The Web site spotlights the Smithsonian's wildlife conservation activities locally and around the world.

National Aquarium

www.nationalaquarium.com

Visit fish and other sea life in downtown DC in the Department of Commerce Building, 14th Street between Pennsylvania and Constitution avenues, NW. Admission is \$5 (cash or check only). Teens also can join the aquarium's volunteer program.

Student Guide to the Human Genome Project

www.ornl.gov/sci/techresources/Human_Genome/education/students.shtml

Learn the history, goals, and discoveries of the Human Genome Project, and visit the links to other resources on genetics, medical research, and related sites. From the U.S. Department of Energy.

Chemistry in *High School*

In Chemistry, high school students study how matter in the universe changes. They investigate the properties and reactions of materials and they predict changes that happen when materials combine and other factors change. Because high school Chemistry is a key to understanding many other sciences, instruction links the study of those materials to what students learn in many areas of their daily lives.

At the end of this Chemistry course, students will be able to use advanced models and mathematical skills to express principles of chemistry and what they mean in the study of the natural world. Students also will be able to apply their knowledge of these principles in other branches of science.

TOPICS COVERED

Science standards in high school build on ideas and topics introduced in earlier grades. Major topics covered by high school Chemistry standards include:

- *Properties of Matter* — The physical properties of matter (such as color, shape, or temperature) and chemical properties (such as how and why certain materials combine with or affect other materials).
- *Acids and Bases* — Compounds that exchange, give up, or attract hydrogen atoms in water solutions.
- *The Atom* — Structure and behavior of the atom and how and why certain atoms will or will not combine.
- *Nuclear Processes* — Processes that occur when the nucleus of an atom changes.
- *Conservation of Matter* — The natural law that matter can be changed, not created or destroyed.
- *Gases and Their Properties* — How the molecules of gases spread out, move, and collide with each other.
- *Solutions* — Study of the mixtures of two or more substances and how the molecules spread out evenly.
- *Chemical Thermodynamics* — How heat affects the speed and process of chemical reactions, as well as their color, shape, size mass, or volume.
- *Organic and Biochemistry* — A study of the molecules and reactions that form living things.

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF THIS HIGH SCHOOL CHEMISTRY COURSE, YOUR CHILD SHOULD KNOW THESE CONCEPTS AND BE ABLE TO PERFORM THESE SKILLS:

Formulate and revise explanations using logic and evidence.

Write equations that describe chemical changes and reactions.

Explain that acids, bases, and salts are three kinds of compounds that form ions (atoms that gain a positive or negative electrical charge) in water.

Describe properties that can be observed in acids, bases, and salt solutions.

Explain that elements are organized on the periodic table of elements into groups with similar physical and chemical properties.

Relate an element's position on the periodic table to the number of protons in its nucleus.

Recognize that when heat is added to a substance, its molecules move apart and move more quickly.

Explain that energy is exchanged or transformed in all chemical reactions and physical changes of matter.

RESOURCES

American Chemical Society's Virtual Chemistry Club

www.chemistry.org (Pull down Quickfind menu and click on "VC2.")

Activities, answers to questions, chemistry history, links, careers, science fairs, and other resources for high school students.

Interactive Periodic Table of the Elements

periodic.lanl.gov/default.htm

Click on an element to see its atomic weight and number, properties, sources, uses, history, and other information. From the Los Alamos National Laboratory's Chemistry Division.

Science Friday

www.sciencefriday.com

Students can download weekly podcasts or play this popular National Public Radio show in real-time audio. The site also offers background, links, and other resources related to program topics.

Marian Koshland Science Museum of the National Academy of Sciences

www.koshland-science-museum.org/

Students can visit changing exhibits at the museum at 6th and E streets, NW (\$3 admission with student ID) or tour the interactive Web site. NAS offers free concerts and exhibits of art and photography related to chemistry and other sciences at 2101 Constitution Ave., NW.

Physics in *High School*

In high school Physics, students explore forces of nature such as gravity, electricity, and magnetism. For example, students learn how to use Newton's laws of motion and energy to analyze forces. They learn how scientists use these laws to predict the motion of objects in a system. Students also study thermodynamics, which deals with exchanges of energy between systems.

Mathematics helps students to express principles and theories about the natural world. In mastering the high school Physics standards, students understand and interpret the evidence that supports the laws of physics. They see how those laws help them understand nature, from the orbits of galaxies all the way down to the smallest atoms.

TOPICS COVERED

Science standards in high school build on ideas and topics introduced in earlier grades. Major topics covered by high school Physics standards include:

- *Scientific Thinking and Inquiry* — A way that scientists ask questions, form theories about the natural world, and collect accurate information to find the answers.
- *Motion and Forces* — The changes of an object's position over time and what causes those changes.
- *Mechanics of Fluids* — How fluids (such as water) behave based on certain properties, including temperature, density, and the energy of the molecules.
- *Heat and Thermodynamics* — How energy is transferred between objects, such as between air molecules in the atmosphere, or between liquids at different temperatures.
- *Electromagnetism* — The interaction of electric and magnetic fields.
- *Nuclear Processes* — Processes that occur when the center, or nucleus, of an atom changes. Examples include fission (splitting the nucleus), fusion (joining together of two or more nuclei), or decay (losing part of the atomic structure over a certain period of time).

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF THIS HIGH SCHOOL PHYSICS COURSE, YOUR CHILD SHOULD KNOW THESE CONCEPTS AND BE ABLE TO PERFORM THESE SKILLS:

Analyze situations and solve problems that require him or her to combine and apply concepts from more than one topic area of science.

Know that the laws of conservation of energy and momentum provide independent ways to describe and predict the motion of objects. For example, when an unbalanced force acts on an object, it will make the object speed up or slow down.

Recognize that when a force is applied at any point to a fluid in a container, the change is felt everywhere in the fluid because the fluid can transfer that energy through the material (Pascal's principle).

Understand that energy cannot be created or destroyed. In many processes, however, energy is changed into heat energy, which is caused when molecules randomly collide with each other.

Describe how waves carry energy from place to place without moving matter. For example, sound travels through the air by making the air vibrate, but after the sound is gone, the air returns to its previous state.

Know that the nucleus occupies a very small part of the space in an atom, but it contains nearly all of the atom's mass.

RESOURCES

U.S. Naval Observatory

www.usno.navy.mil

Home of the popular "The Sky This Week" report and images, the Web site also offers the exact time of day, real-time solar and space weather reports, and updates on current space explorations. Groups can tour the Observatory in Northwest DC with advance reservations.

Physics Central from the American Physical Society

www.physicscentral.org

News, interactive features, images, links, and research about physics in daily life.

National Building Museum

www.nbm.org

Students can see physics applied to solve practical problems in architecture and engineering in museum exhibits at the museum's downtown DC location (401 F St., NW) or online. The museum also offers family programs and educational resources.

National Aeronautics and Space Administration

www.nasa.gov/audience/forstudents/9-12/features/index.html

NASA's site for students is a gold mine of features, learning opportunities, space images, and podcasts about current missions.

Social Studies in *Grade 9*

Starting in the 2007–08 school year, grade 9 students will explore how societies developed in the Middle Ages — including the growth of Islam from the Middle East and the rise of civilizations in China, medieval Japan, sub-Saharan and West Africa, Europe, and Mesoamerica.

Grade 9 students will learn how these cultures branched out and influenced each other during the 14th, 15th, and 16th centuries, including the growth of exploration and trade, the expansion of thought and religion in the Renaissance and the Reformation, and the rise of colonialism. They will explore how each culture developed its own science and ideas in the 17th and 18th centuries. Students also will trace the growth of slave trading from Africa to Europe and North and South America.

TOPICS COVERED

Social studies standards cover four major areas:

- *History* — the study of past events that have important effects on our country and our world
- *Geography* — the study of the Earth's physical features, as well as the effects of human life and activity on Earth
- *Economics* — the study of how people and societies produce, buy, sell, and use goods and services
- *Civics* — the study of politics, government, and the rights and duties of citizens

In each grade, students focus on different ideas within the main areas. In grade 9, standards include the world history and geography of three eras: the early Middle Ages, 5th to 14th centuries; early modern times, 14th century to 1650; and Age of Revolutions (17th and 18th centuries).

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF GRADE 9, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Trace the beginnings of Islam and the life and teachings of the Prophet Muhammad.

Trace the spread of Chinese technologies, such as making paper, printing with wood blocks, and the inventions of the compass and gunpowder.

Explain the major features of Shinto, Japan's locally developed religion.

Locate and identify the sites of the African civilizations of Ghana, Mali, and Songhai in the Middle Ages. Show the growth of these kingdoms, which developed into important centers of culture and learning.

Locate and explain the lands and climates of Mexico, Central America, and South America and their effects on the great civilizations of Maya, Inca, and Aztec.

Describe how the Ottoman Empire expanded into North Africa, Eastern Europe, and throughout the Middle East.

Explain how the city of Florence was important in the early part of the Renaissance and how trading cities such as Venice were important to the spread of ideas.

Describe the goals and locations of Dutch, English, French, and Spanish settlements in the Americas.

RESOURCES

National Museum of African Art

(950 Independence Ave., SW)

africa.si.edu

Art and artifacts, films, research materials, and activities from Africa's many historic cultures and nations. The Web site is a rich resource that includes virtual tours and other online activities, podcasts of music by African musicians, and much more.

The Ottomans.org

www.theottomans.org

An online exhibition and resources for the art, architecture, science, and other aspects of Ottoman history and culture.

Freer and Sackler Galleries

(1050 Independence Ave., SW)

www.asia.si.edu

Art, artifacts, films, and culture from the great civilizations of Asia and the Islamic world. The Web site offers podcasts and streaming music, virtual tours, and information on cultural activities.

National Museum of the American Indian (4th and Independence Ave., SW)

www.nmai.si.edu

Art and cultural objects by Native Americans, including the earliest civilizations, such as the Olmecs, Maya, Anasazi, and others. The Web site offers information on events and exhibitions.

Social Studies in *Grade 10*

In grade 10, students explore the development of the modern world, from the late 18th century to the present. They study the rise of European nation states and the economic and political roots of western nations, including the Americas.

Grade 10 students learn about the origins and results of the Industrial Revolution, 19th-century political reform in Western Europe and western imperialism in Africa, Asia, and South America. They study the causes and results of World Wars I and II, the Great Depression, and the communist revolutions in Russia and China. They relate the rise of nationalism to continuing political, ethnic, and religious conflict in many parts of the world.

TOPICS COVERED

Social studies standards cover four major areas:

- *History* — the study of past events that have important effects on our country and our world
- *Geography* — the study of the Earth's physical features, as well as the effects of human life and activity on Earth
- *Economics* — the study of how people and societies produce, buy, sell, and use goods and services
- *Civics* — the study of politics, government, and the rights and duties of citizens

In each grade, students focus on different ideas within the main areas. In grade 10, standards include the world history and geography of three eras: Age of Revolutions (18th century to 1914); the Great Wars (1914 to 1945); and the Cold War (1947) to the present.

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF GRADE 10, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Describe the growth of cities, including the movement from rural areas to cities.

Describe the leaders of independence movements in Latin America and their ideas, including Miguel Hidalgo (Mexico) and Simon Bolivar (Venezuela, Colombia, Ecuador, Panama, Peru).

Analyze the reasons presented by leaders of all sides for entering into World War I.

Describe the advances in warfare, including tanks and airplanes, in World War I. Explain the belief that this would be the “war to end all wars.”

Explain the influence of World War I on artists and intellectuals of the time, such as Pablo Picasso and Ernest Hemingway.

Discuss the human costs of World War II, including the deaths of soldiers and civilians of Russia, Germany, Britain, the United States, China, and Japan.

Discuss the causes and results of the global depression of the 1930s, and analyze how different governments responded.

Explain how the United States and the Soviet Union competed in Southeast Asia and the conflicts that resulted — for example, the Korean War, the Vietnam War, and the involvement of China.

RESOURCES

United States Holocaust Memorial

Museum (100 Raoul Wallenberg Place, SW)
www.ushmm.org/education/forstudents/activities

Online activities and exhibitions related to the genocide of Jews in Europe by the Nazis during World War II. To view the permanent exhibition at the museum, get free, timed passes at the museum.

Art Gallery at the Canadian Embassy

(501 Pennsylvania Ave., NW)
www.cdnarts@canadianembassy.org

Free exhibitions of Canadian art and culture, including art of native Inuit artists. Click on “English,” then “Canadian Arts” and “Culture in DC.”

National Textile Museum

(2320 S St., NW)
www.textilemuseum.org

The history of cultures of the Middle East, Mesoamerica, Asia, and other regions come alive in fabrics for garments and homes. The museum offers changing exhibits and activities. The Web site offers information on activities and current and past exhibits.

Art Museum of the Americas

(201 18th St., NW)
www.museum.oas.org

Art from Central and South America and the Caribbean shown in a historic diplomatic home on the grounds of the Organization of American States. The Web site offers a virtual tour.

Social Studies in *Grade 11*

In grade 11, students explore major themes that emerged in America during the 20th century. These include the expanding role of the federal government, equal rights for minorities and women, growth of the modern market economy, and the continuing impact of technology.

Grade 11 students also learn about factors that led the United States to enter World Wars I and II and the effects these wars had on daily life in this country. They study the causes and results of the Cold War with the Soviet Union and its allies, and they analyze recent events and trends that shape the United States today.

TOPICS COVERED

Social studies standards cover four major areas:

- *History* — the study of past events that have important effects on our country and our world
- *Geography* — the study of the Earth's physical features, as well as the effects of human life and activity on Earth
- *Economics* — the study of how people and societies produce, buy, sell, and use goods and services
- *Civics* — the study of politics, government, and the rights and duties of citizens

In each grade, students focus on different ideas within the main areas. In grade 11, standards include the following topics: the United States to the 1800s, the rise of industrial America (1877–1914), the Progressive Era (1890–1920), the 1920s and 1930s, the Great Depression (1929–1939), World War II (1939–1947), the Cold War to the new millennium (1947–2001), and contemporary America.

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF GRADE 11, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

Trace how the Industrial Revolution changed economic, social, and political conditions in the United States.

Identify the countries, such as Italy, Poland, China, Korea, and Japan, where large numbers of people left to move to the United States at the end of the 19th and early 20th centuries.

Find on a map the U.S. cities where these immigrants settled.

Explain the effects of widespread industrial development on living and working conditions in the United States, including child labor and the child protection movement and the migration of African Americans from rural areas to the cities.

Describe the Spanish-American War and how it resulted in the United States' expansion into the South Pacific.

Trace the growing popularity of radio and the movies and their role in carrying U.S. popular culture around the world.

Use a map to show how the Great Depression affected different regions of the United States.

Describe the Manhattan Project, the successful effort by the United States to develop the atomic bomb. Explain the results of the decision to drop the bomb on two cities in Japan near the end of World War II.

Analyze the goals, key events, and accomplishments of the Civil Rights movement in the United States.

RESOURCES

National World War II Memorial

(on the Mall at 17th St., between Constitution and Independence Ave., NW)

www.wwiimemorial.com

The memorial offers a broad history of the war and honors the 16 million people who served in it and the 400,000 soldiers who died in it.

African American Civil War Memorial Freedom Foundation and Museum

(1200 U St., NW)

afroamcivilwar.org

The only national memorial of its kind commemorates 200,000 African American soldiers who served in the war. The museum also offers exhibits, activities, and online access to historic photos and other resources.

The Cold War Museum

www.coldwar.org

An online collection of images, accounts, and other memorabilia of U.S. relations with the Soviet Union and Eastern Europe between the end of World War II and the fall of the Soviet Empire in the 1980s.

American Immigration Law Foundation

(918 F St., NW)

www.alif.org

In its historic downtown building, the foundation offers free exhibits of immigrant experiences and issues through the decades. Check the Web site for information.

Social Studies in *Grade 12*

American Government

This course covers purposes, principles, and practices of our country's laws, organization, and leadership. Students gain civic literacy skills that prepare them to vote, become responsible citizens, and become involved in their communities.

District of Columbia History and Government

This course covers development of the city from the early Native American settlements to the present day. Students learn about the structure and operation of the city government established by the District of Columbia Home Rule Act of 1973.

TOPICS COVERED

Social studies standards cover four major areas:

- *History* — the study of past events that have important effects on our country and our world
- *Geography* — the study of the Earth's physical features, as well as the effects of human life and activity on Earth
- *Economics* — the study of how people and societies produce, buy, sell, and use goods and services
- *Civics* — the study of politics, government, and the rights and duties of citizens

In each grade, students focus on different ideas within the main areas. In grade 12, students take one semester of American Government and one semester of District of Columbia History and Government.

WHAT YOUR CHILD SHOULD KNOW

BY THE END OF GRADE 12, YOUR CHILD SHOULD KNOW AND BE ABLE TO PERFORM THESE SKILLS:

AMERICAN GOVERNMENT:

Explain the powers granted to the three branches of U.S. government: legislative, executive, and judicial. Explain the system of checks and balances among the three branches.

Explain the laws and legal rulings (precedents) that established rights for minorities, women, disabled persons, and other groups.

Analyze the origin, development, and role of political parties, noting periods when there was only one major party or there were more than two major parties.

Evaluate the roles of polls, campaign advertising, and the controversies over campaign funding.

DISTRICT OF COLUMBIA HISTORY AND GOVERNMENT:

Find the original federal district on a map and identify its main physical features, such as Capitol Hill and the Anacostia River.

Describe life in the District of Columbia during the Civil War. Explain the effects of Compensated Emancipation and the Emancipation Proclamation on the District.

Explain how the population of the District grew and became more diverse as immigrant minorities settled here.

Explain why and how Congress ended home rule for the District of Columbia in 1874.

RESOURCES

National Archives (700 Pennsylvania Ave., NW)

www.archives.gov

The original U.S. Constitution, Bill of Rights, and Declaration of Independence are on view in the Rotunda. The Web site offers a virtual view.

African American Heritage Trail Database

www.culturaltourismdc.org/info-url3948/info-url.htm

Information on more than 200 sites important to African American history in Washington, DC, is available.

Historical Society of Washington, DC

www.citymuseumdc.org

Exhibitions and special events illuminating District of Columbia history. The Web site provides a calendar and background on exhibitions.

Martin Luther King, Jr., Memorial Library

www.dclibrary.org

An extensive collection of books and other resources on Washington, DC, history, African American history and literature, and more. The Web site offers a calendar of events and resources for readers.

How Is *Your Child* Doing?



New tests will let you and the teacher know how well your child is meeting the standards.

Standardized reading/English language arts and mathematics tests are given to students in grades 3–8 and 10 every spring. A composition test to measure students' writing skills is given in grades 4, 7, and 9. Different tests also monitor reading progress for children in grades kindergarten–2.

Beginning in spring 2008, a new end-of-year science test will be given to at least one grade each in elementary, middle, and high schools. Other tests are being developed to measure students' progress in Algebra I and Geometry, high school English, and the sciences.

In addition to these districtwide tests, your child's teacher will be giving informal tests and quizzes throughout the year.

Checklist

As a parent, you are your child's most important teacher — and best advocate. Let your child know you care about his/her school performance. Make sure your child's teacher knows that you are engaged as well.

Here are some ways you can help your child meet the new standards. *Don't feel you must do everything on this list. Just letting your child know that you expect him/her to do well in school is very important.*

- Talk to your child about what he/she learned and did in school that day.
- Praise your child when he/she does well or makes a good effort.
- Ask to see and sign homework every day.
- Attend parent-teacher conferences. Ask the teacher how you can help your child succeed.
- If you think your child could use extra help, ask the teacher to help you find a tutor, a reading specialist, or other resources.
- Visit your child's classroom, and volunteer for school activities.
- Read the material your child brings home from school. If your child has not brought home any material, find out why.
- Learn your rights and options for tutoring help and transferring schools under the No Child Left Behind Act. On the Web, visit www.NCLB.gov.

Learn More

You can view the complete standards for reading/English language arts, mathematics, science, and social studies on the DCPS Web site, www.k12.dc.us.

For a printed copy of this standards guide for parents, call (202) 724-4222. The parent guides are available in six languages: English, Amharic, French, Mandarin Chinese, Spanish, and Vietnamese.

The District of Columbia Public Schools does not discriminate in its programs and activities on the basis of race, color, religion, national origin, sex, age, marital status, personal appearance, sexual orientation, family responsibilities, matriculation, political affiliation, disability, source of income, or place of residence or business. Discrimination will not be tolerated and persons engaging in such will be subject to disciplinary action.

